REMARKS

Reconsideration of this application is respectfully requested.

Claims 1-6, 24-31 and 52-53 are in the application. Through this Amendment, claims 1 and 24 have been amended. In addition, new claims 52 and 53 have been added. Support for new claims 52 and 53 may be found at Example 1 of Applicant's specification, more particularly para. [0071] (as set forth in the subject application as published).

In the Official Action, the Examiner rejected claims 1, 2, 4, 6 and 24-27 under 35 U.S.C. §103(a) as being allegedly unpatentable over Sjoholm et al. (U.S. Patent No. 4,061,466) in view of Spring et al. (U.S. Patent No. 5,643,721) and further in view of Degen et al. (U.S. Patent No. 5,567,615). The Examiner admitted that "Sjoholm et al. fail to teach the ligand attached to the support via an epoxy linkage." The Examiner relied on Spring et al. and Degen et al. for allegedly overcoming this deficiency.

Sjoholm et al. is directed to a biologically active composition and the use thereof. As indicated at col. 2, ll. 35-38, "[t]he biologically active substance is composed of macromolecules such as proteins, polysaccharides, polyamino acids, nucleic acids, separately or in mixtures with each other." The Examiner specifically relied on Example 9 of Sjoholm et al. Example 9 of Sjoholm et al. specifically refers back to Example 1. (Col. 9, ll. 37-39). In Example 1, albumin is immobilized on a support surface. With Example 9 referring back to Example 1, the bromosulphophthalein of Example 9 is exposed to albumin, contrary to claims 1 and 24. This is a fair reading of Sjoholm et al., since examples which exclude albumin specifically so state. With reference to Example 4, it is specifically stated that "the albumin changed for Concanavalin A (2 mg/ml)." In addition, in Example 10, it is stated that "poly-1-lysin could be entrapped in micro particles instead of albumin." Thus, it is clear that where Sjoholm et al. intended on having albumin substituted for a second material, it is explicitly stated so. In addition, as indicated above, Sjoholm et al. discloses the use of mixtures of proteins and polysaccharides.

(See, col. 2, ll. 35-38). Also, column 2, lines 38-40 indicates that the biologically active substance (which may be a combination of materials) may be conjugated with a colourant (Example 9 discloses bromosulphophthalein as a dye). In contrast to Sjoholm et al., claims 1 and 24 of the subject application require attaching a ligand consisting of bromosulfophthalein as claimed without being exposed to albumin. There is no such disclosure or suggestion in Sjoholm et al. Moreover, Spring et al. and Degen et al. fail to overcome this deficiency. It is respectfully submitted that claims 1 and 24, along with dependent claims 2, 4, 6 and 25-27, are patentable over Sjoholm et al., Spring et al. and Degen et al., each taken alone or in combination.

The Examiner rejected claims 1-6 and 24-27 under 35 U.S.C. §103(a) as being allegedly unpatentable over Grahnen et al. (Eur. J. Biochem., 80, 573-580 (1997)) in view of Spring et al. and further in view of Degen et al. The Examiner admitted that "Grahnen et al. fail to teach the ligand attached to the support via an epoxy linkage" and relied on Spring et al. and Degen et al. for allegedly overcoming this deficiency.

Grahnen et al. is directed to a method of preparation of ligandin with glutathione-*S*-transferase activity from porcine liver cytolsol. As set forth at p. 574 of Grahnen et al., bromosulfophthalein is initially prepared with sodium borohydride. The soldium borohydride is a reducing agent. In particular, the boron of the sodium borohydride complexes with oxygen found on cross-linked sepharose (cross-linked with 2,3-dibromopropanol) as disclosed in Sjoholm et al. With oxygen being complexed in this process, it is unclear how an epoxy linkage can be substituted in. Chemistry is highly unpredictable, particularly the behavior of molecules and their reactions are highly unpredictable. Thus, there is no basis for determining that the hypothetical combination suggested by the Examiner can be achieved. It is respectfully submitted that claims 1-6 and 24-27 are patentable over Grahnen et al., Spring et al. and Degen et al., each taken alone or in combination.

The Examiner rejected claims 24 and 27-31 under 35 U.S.C. §103(a) as being allegedly unpatentable over Pieper et al. (U.S. Published Patent Application No. 2002/0127739) in view of Grahnen et al., and further in view of Spring et al. and further in view of Degen et al. The Examiner admitted that Pieper et al. fail to teach a ligand of bromosulfophthalein. The Examiner relied on Grahnen et al. for allegedly overcoming this deficiency. The Examiner further relied on Spring et al. and Degen et al. for the alleged notion of substituting an epoxy linkage.

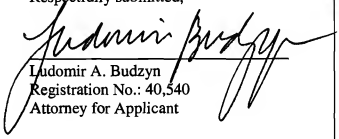
Pieper et al. is directed to a method for sample preparation which, as admitted by the Examiner, does not disclose the use of bromosulfophthalein. As set forth at p. 9, paras. [0100]-[0103], the use of antibodies is disclosed for binding to albumin. Claim 24 indicates the use of a ligand with "said ligand being bindable to albumin" and the ligand "consisting of bromosulfophthalein or a salt of bromosulfophthalein or ester of bromosulfophthalein". There is no suggestion or disclosure in Pieper et al. of using a ligand consisting of bromosulfophthalein, as set forth in claim 24, which is bindable to albumin. Moreover, Grahnen et al. does not disclose the use of bromosulfophthalein with albumin. Rather, Grahnen et al. is directed to a method for extracting ligandin, which is an enzyme from pig liver. One skilled in the art would not look to Grahnen et al. to modify Pieper et al. to include a ligand consisting of bromosulfophthalein which is bindable to albumin. Spring et al. and Degen et al. fail to overcome this deficiency. Moreover, claim 24 requires an epoxy linkage. Pieper et al. has no disclosure of suggestion of using an epoxy linkage with bromosulfophthalein. For the reasons set forth above, Grahnen et al. cannot be relied on to overcome this deficiency. It is respectfully submitted that claims 24 and 27-31 are patentable over Pieper et al., Grahnen et al., Spring et al. and Degen et al., each taken alone or in combination.

New claims 52 and 53 have been added which depend from claims 1 and 24, respectively. These claims specify that the "insoluble support is epoxy-activated." The cited references fail to disclose such. Specifically, Sjoholm et al. and Grahnen et al. disclose cross-linked agarose (see, Example 9 of Sjoholm et al; p. 574 of Grahnen et al.) while Pieper et al.

discloses unmodified agarose (p. 3, para. [0038]). It is respectfully submitted that claims 52 and 53 provide additional bases of patentability beyond that discussed above.

Favorable action is earnestly solicited. If there are any questions or if additional information is required, the Examiner is respectfully requested to contact Applicant's attorney at the number listed below.

Respectfully submitted,



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